

Amendments to the Specification:

Please delete Table 4C beginning at page 36.

Please delete Table 4D beginning at page 36.

- 5 Please replace Table 4A beginning at page 32 with the following amended Table:

Table 4A. Examples of Immunomer Sequences

Oligo or Immunomer No. <u>SEQ ID NO.</u>	Sequences and Modification (5'-3')
1	5'-GAGAACGCTCGACCTT-3'
2	5'-GAGAACGCTCGACCTT-3'-3'-TTCCAGCTCGCAAGAG-5'
3	3'-TTCCAGCTCGCAAGAG-5'-5'-GAGAACGCTCGACCTT-3'
4	5'-CTATCTGACGTTCTCTGT-3'
5	5'-T-3' $\left\{ \begin{array}{l} \text{HNCO-C}_4\text{H}_8\text{-5'-CTATLTGACGTTCTCTGT-3'} \\ \text{HNCO-C}_4\text{H}_8\text{-5'-CTATLTGACGTTCTCTGT-3'} \end{array} \right.$
6	$\left. \begin{array}{l} 5\text{'-CTATLTGACGTTCTCTGT-3'-C}_4\text{H}_8\text{-CONH} \\ 5\text{'-CTATLTGACGTTCTCTGT-3'-C}_4\text{H}_8\text{-CONH} \end{array} \right\} 3\text{'-C-5'}$
7	$\left. \begin{array}{l} 5\text{'-CTATCTGACGTTCTCTGT-3'-C}_4\text{H}_8\text{-CONH} \\ 5\text{'-CTATCTGACGTTCTCTGT-3'-C}_4\text{H}_8\text{-CONH} \end{array} \right\} 3\text{'-C-5'}$
8	$\left. \begin{array}{l} 5\text{'-CTATCTGACGTTCTCTGT-3'} \\ 5\text{'-CTATCTGACGTTCTCTGT-3'} \end{array} \right\} 3\text{'-C-5'}$
9	$\left. \begin{array}{l} 5\text{'-CTATCTGAYGTTCTCTGT-3'} \\ 5\text{'-CTATCTGAYGTTCTCTGT-3'} \end{array} \right\} 3\text{'-C-5'}$
10	$\left. \begin{array}{l} 5\text{'-CTATCTGACRTTCTCTGT-3'} \\ 5\text{'-CTATCTGACRTTCTCTGT-3'} \end{array} \right\} 3\text{'-C-5'}$
11	$\left. \begin{array}{l} 5\text{'-CTALCTGAYGTTCTCTGT-3'} \\ 5\text{'-CTALCTGAYGTTCTCTGT-3'} \end{array} \right\} 3\text{'-C-5'}$
12	$\left. \begin{array}{l} 5\text{'-CTALCTGACRTTCTCTGT-3'} \\ 5\text{'-CTALCTGACRTTCTCTGT-3'} \end{array} \right\} 3\text{'-C-5'}$
13	5'-CTGACGTTCTCTGT-3'
14	$\left. \begin{array}{l} 5\text{'-CTGACGTTCTCTGT-3'} \\ 5\text{'-CTGACGTTCTCTGT-3'} \end{array} \right\} 3\text{'-C-5'}$
15	$\left. \begin{array}{l} 5\text{'-CTGAYGTTCTCTGT-3'} \\ 5\text{'-CTGAYGTTCTCTGT-3'} \end{array} \right\} 3\text{'-C-5'}$

16	5'-CTGACRTTCTCTGT-3' 5'-CTGACRTTCTCTGT-3' } 3'-C-5'
17	5'-XXTGACGTTCTCTGT-3'
18	5'-XXXTGACGTTCTCTGT-3' 5'-XXXTGACGTTCTCTGT-3' } 3'-C-5'
19	5'-XXXTGAYGTTCTCTGT-3' 5'-XXXTGAYGTTCTCTGT-3' } 3'-C-5'
20	5'-XXXTGACRTTCTCTGT-3' 5'-XXXTGACRTTCTCTGT-3' } 3'-C-5'
21	5'-TCTGACGTTCT-3'
22	5'-XXXTCTGACGTTCT-3' 5'-XXXTCTGACGTTCT-3' } 3'-C-5'
23	5'-XXXTCTGAYGTTCT-3' 5'-XXXTCTGAYGTTCT-3' } 3'-C-5'
24	5'-XXXTCTGACRTTCT-3' 5'-XXXTCTGACRTTCT-3' } 3'-C-5'

Please replace Table 4B beginning at page 35 with the following amended Table:

Table 4B. Examples of Immunomer Sequences

Oligo or Immunomer No. SEQ ID NO.	Sequences (5'-3')	Modifications
170	5'-TCTGTCGTTCT-X-CTCTGCTGCT-5'	Q=1-(2'-deoxy-β-D-ribofuranosyl)-2-oxo-7-deaza-8-methyl-purine; X=glycerol linker
171	5'-CTGTCGTTCTC-X-CTCTGCTGCT-5'	P=araG; X=glycerol linker
172	5'-TCGTCGTTCTG-X-GTCTTGCTGCT-5'	Z=2'-deoxy-7-deazaguanosine; X=glycerol linker
173 26	5'-TCTGTCGTTCT-X-CTCTGCTGCT-5'	G=2'-deoxy-7-deazaguanosine; X=glycerol linker
174 173	5'-TCTGTCGTTCT-X-CTCTGCTGCT-5'	G=arabinoguanosine; X=glycerol linker
175 170	5'-TCTGTCGTTCT-X-CTCTGCTGCT-5'	C=1-(2'-deoxy-β-D-ribofuranosyl)-2-oxo-7-deaza-8-methylpurine; X=glycerol linker
176 174	5'-TCTGTCGTTCT-X-CTCTGCTGCT-5'	C=arabinocytidine; X=glycerol linker
177 175	5'-TCTGTCGTTCT-X-CTCTGCTGCT-5'	C=2'-deoxy-5-hydroxycytidine; X=glycerol linker
178 176	5'-CTGTCGTTCTC-X-CTCTGCTGCT-5'	G=2'-deoxy-7-deazaguanosine; X=glycerol linker
179 171	5'-CTGTCGTTCTC-X-CTCTGCTGCT-5'	G=arabinoguanosine; X=glycerol linker
180 177	5'-CTGTCGTTCTC-X-CTCTGCTGCT-5'	C=1-(2'-deoxy-β-D-ribofuranosyl)-2-oxo-7-deaza-8-methylpurine; X=glycerol linker
181 178	5'-CTGTCGTTCTC-X-CTCTGCTGCT-5'	C=arabinocytidine; X=glycerol linker
182 179	5'-CTGTCGTTCTC-X-CTCTGCTGCT-5'	C=2'-deoxy-5-hydroxycytidine; X=glycerol linker
183 172	5'-TCGTCGTTCTG-X-GTCTTGCTGCT-5'	G=2'-deoxy-7-deazaguanosine; X=glycerol linker
184 180	5'-TCGTCGTTCTG-X-GTCTTGCTGCT-5'	G=arabinoguanosine; X=glycerol linker
185 181	5'-TCGTCGTTCTG-X-GTCTTGCTGCT-5'	C=1-(2'-deoxy-β-D-ribofuranosyl)-2-oxo-7-deaza-8-methylpurine; X=glycerol linker
186 182	5'-TCGTCGTTCTG-X-GTCTTGCTGCT-5'	C=arabinocytidine; X=glycerol linker
187 183	5'-TCGTCGTTCTG-X-GTCTTGCTGCT-5'	C=2'-deoxy-5-hydroxycytidine; X=glycerol linker
188 184	5'-TC ₁ G ₁ TC ₂ G ₂ TTCTG-X-GTCTTG ₃ C ₃ TG ₄ C ₄ T-5'	C ₁ , C ₂ , C ₃ , and C ₄ are independently 2'-deoxycytidine, 1-(2'-deoxy-β-D-ribofuranosyl)-2-oxo-7-deaza-8-methylpurine, arabinocytidine, or 2'-deoxy-5-hydroxycytidine. G ₁ , G ₂ , G ₃ , and G ₄ are independently 2'-deoxyguanosine, 2'-deoxy-7-deazaguanosine, or arabinoguanosine

Please replace Table 5 beginning at page 44 with the following amended Table:

Table 5. Immunomer Structure and Immunostimulatory Activity in Human PBMC Cultures

Oligo No. SEQ ID NO.	Sequences and Modification (5'-3')	Oligo Length/ or Each Chain	IL-12 (pg/mL)		IL-6 (pg/mL)	
			D1	D2	D1	D2
25	5'-CTATCTGTCGTTCTCTGT-3'	18mer (PS)	184	332	3077	5369
26	5'-TCTGTCR ₁ TTCT-3' \searrow X ₁ 5'-TCTGTCR ₁ TTCT-3' \searrow X ₁	11mer (PS)	237	352	3724	4892

Oligo No. SEQ ID NO.	Sequences and Modification (5'-3')	Oligo Length/ or Each Chain	IL-10 (pg/mL)		IFN- γ (pg/mL)	
			D1	D2	D1	D2
25	5'-CTATCTGTCGTTCTCTGT-3'	18mer (PS)	37	88	125	84
26	5'-TCTGTCR ₁ TTCT-3' \searrow X ₁ 5'-TCTGTCR ₁ TTCT-3' \searrow X ₁	11mer (PS)	48	139	251	40

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Oligo No. SEQ ID NO.	Sequences and Modification (5'-3')	Oligo Length/ or Each Chain	TNF- α (pg/mL)	
			D1	D2
25	5'-CTATCTGTCGTTCTCTGT-3'	18mer (PS)	537	nt
26	5'-TCTGTCR ₁ TTCT-3' \searrow X ₁ 5'-TCTGTCR ₁ TTCT-3' \searrow X ₁	11mer (PS)	681	nt

Please replace Table 5A beginning at page 45 with the following amended Table:

Table 5A. Immunomer Structure and Immunostimulatory Activity in BALB/c Mouse Spleen Cell Cultures

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Oligo No. SEQ ID NO.	Sequences and Modification (5'-3')	Oligo Length/ or Each Chain	IL-12 (pg/mL)	IL-6 (pg/mL)
			3 μ g/mL	10 μ g/mL
26	5'-TCTGTCR ₁ TTCT-3' \searrow X ₁ 5'-TCTGTCR ₁ TTCT-3' \searrow X ₁	11mer (PS)	870	10670
27	5'-TCTGTCR ₂ TTCT-3' \searrow X ₁ 5'-TCTGTCR ₂ TTCT-3' \searrow X ₁	11mer (PS)	1441	7664

28	5'-TCTGTY ₂ R ₂ TTCT-3' \searrow X ₁ 5'-TCTGTY ₂ R ₂ TTCT-3' \searrow X ₁	11mer (PS)	1208	1021
29	5'-XXTCTGTCR ₁ TTCT-3' \searrow X ₁ 5'-XXTCTGTCR ₁ TTCT-3' \searrow X ₁	11mer (PS)	162	1013
30	5'-CTGTCR ₂ TTCTCTGT-3' \searrow X ₁ 5'-CTGTCR ₂ TTCTCTGT-3' \searrow X ₁	14mer (PO)	264	251
31	5'-CTGTY ₂ R ₂ TTCTCTGT-3' \searrow X ₁ 5'-CTGTY ₂ R ₂ TTCTCTGT-3' \searrow X ₁	14mer (PO)	149	119
32	5'-TCTGACR ₁ TTCT-3' \searrow X ₁ 5'-TCTGACR ₁ TTCT-3' \searrow X ₁	11mer (PS)	2520	9699
33	5'-XXTCTGACR ₁ TTCT-3' \searrow X ₁ 5'-XXTCTGACR ₁ TTCT-3' \searrow X ₁	11mer (PS)	2214	16881
34	5'-TCTGACR ₂ TTCT-3' \searrow X ₁ 5'-TCTGACR ₂ TTCT-3' \searrow X ₁	11mer PS)	3945	10766
35	5'-TCTGAY ₂ R ₂ TTCT-3' \searrow X ₁ 5'-TCTGAY ₂ R ₂ TTCT-3' \searrow X ₁	11mer (PS)	2573	19411
36	5'-CTGAY ₂ GTTCTCTGT-3' \searrow X ₁ 5'-CTGAY ₂ GTTCTCTGT-3' \searrow X ₁	14mer (PO)	2699	408
37	5'-CTGACR ₂ TTCTCTGT-3' \searrow X ₁ 5'-CTGACR ₂ TTCTCTGT-3' \searrow X ₁	14mer (PO)	839	85
38	5'-CTGAY ₂ R ₂ TTCTCTGT-3' \searrow X ₁ 5'-CTGAY ₂ R ₂ TTCTCTGT-3' \searrow X ₁	14mer (PO)	143	160

Please replace Table 6 beginning at page 47 with the following amended Table:

Table 6. Immunomer Structure and Immunostimulatory Activity

No. SEQ ID NO.	Sequences and Modification (5'-3')	Oligo Length/ or Each Chain	IL-12 (pg/mL)	IL-6 (pg/mL)
			@ 0.3 µg/mL	@ 0.3 µg/mL
4	5'-CTATCTGACGTTCTCTGT-3'	18mer	1802	176
39	5'-CTATCTGACGTTCTCTGT-3' \searrow 3'-T-5' 5'-CTATCTGACGTTCTCTGT-3' \searrow 3'-T-5'	18mer	1221	148
40	5'-CTGACGTTCTCTGT-3' \searrow 3'-T-5' 5'-CTGACGTTCTCTGT-3' \searrow 3'-T-5'	14mer	2107	548
41	5'-TCTGACGTTCT-3' \searrow 3'-T-5' 5'-TCTGACGTTCT-3' \searrow 3'-T-5'	11mer	3838	1191
42	5'-GACGTTCT-3' \searrow 3'-T-5' 5'-GACGTTCT-3' \searrow 3'-T-5'	8mer	567	52

Please replace Table 7 beginning at page 48 with the following amended Table:

Table 7. Immunomer Structure and Immunostimulatory Activity

<u>No.</u> <u>SEQ</u> <u>ID</u> <u>NO.</u>	Sequences and Modification (5'-3')	Oligo Length/ or Each Chain	IL-12 (pg/mL)	IL-6 (pg/mL)
			1 µg/mL	1 µg/mL
25	5'-CTATCTGTCGTTCTCTGT-3'	18mer	291	65
43	5'-CTATCTGTCGTTCTCTGT-3' 5'-CTATCTGTCGTTCTCTGT-3' } 3'-T-5'	18mer	430	39
44	5'-CTGTCGTTCTCTGT-3' 5'-CTGTCGTTCTCTGT-3' } 3'-T-5'	14mer	813	59
45	5'-CTGTCGTTCTCT-3' 5'-CTGTCGTTCTCT-3' } 3'-T-5'	12mer	1533	123
46	5'-TCTGTCGTTCT-3' 5'-TCTGTCGTTCT-3' } 3'-T-5'	11mer	2933	505
47	5'-GTCGTTCT-3' 5'-GTCGTTCT-3' } 3'-T-5'	8mer	1086	26
48	5'-GTCGTTCT-3' 5'-GTCGTTCT-3' } 3'-T-5'	7mer	585	34
49	5'-GTCGTT-3' 5'-GTCGTT-3' } 3'-T-5'	6mer	764	76
50	5'-TCGTT-3' 5'-TCGTT-3' } 3'-T-5'	5mer	28	29

Please replace Table 8 beginning at page 49 with the following amended Table:

Table 8. Immunomer Structure and Immunostimulatory Activity

<u>No.</u> <u>SEQ</u> <u>ID NO.</u>	Sequences and Modification (5'-3')	Oligo Length/ or Each Chain	IL-12 (pg/mL)	IL-6 (pg/mL)
			1 µg/mL	1 µg/mL
51	5'-CTCACTTTCGTTCTCTGT-3'	18mer	91	73
52	5'-CTCACTTTCGTTCTCTGT-3' 5'-CTCACTTTCGTTCTCTGT-3' } 3'-T-5'	18mer	502	99
53	5'-CTTTCGTTCTCTGT-3' 5'-CTTTCGTTCTCTGT-3' } 3'-T-5'	14mer	683	119
54	5'-CTTTCGTTCTCT-3' 5'-CTTTCGTTCTCT-3' } 3'-T-5'	12mer	633	102
55	5'-TTCGTTCT-3' 5'-TTCGTTCT-3' } 3'-T-5'	8mer	687	243
56	5'-TCGTTCT-3' 5'-TCGTTCT-3' } 3'-T-5'	7mer	592	1252

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Please replace Table 9 beginning at page 50 with the following amended Table:

Table 9. Immunomer Structure and Immunostimulatory Activity

<u>No.</u> <u>SEQ</u> <u>ID NO.</u>	Sequences and Modification (5'-3')	Oligo Length/ or Each Chain	IL-12 (pg/mL)	IL-6 (pg/mL)
			@ 3 µg/mL	@ 3 µg/mL
51	5'-CTCACTTTCGTTCTCTGT-3'	18mer	404	348
57	5'-TCTTTYGTTCT-3' 5'-TCTTTYGTTCT-3' } 3'-T-5'	11mer	591	365
58	5'-TCTTTCRTTCT-3' 5'-TCTTTCRTTCT-3' } 3'-T-5'	11mer	303	283
59	5'-TTYGTTCT-3' 5'-TTYGTTCT-3' } 3'-T-5'	8mer	55	66
60	5'-TTCRTTCT-3' 5'-TTCRTTCT-3' } 3'-T-5'	8mer	242	143

Please replace Table 10 beginning at page 51 with the following amended Table:

Table 10. Immunomer Structure and Immunostimulatory Activity

<u>No.</u> <u>SEQ</u> <u>ID NO.</u>	Sequences and Modification (5'-3')	Oligo Length/ or Each Chain	IL-12 (pg/mL)	IL-6 (pg/mL)
			3 µg/mL	3 µg/mL
25	5'-CTATCTGTCGTTCTCTGT-3'	18mer	379	339
61	5'-TCTGTYGTTCT-3' 5'-TCTGTYGTTCT-3' } 3'-T-5'	11mer	1127	470
62	5'-TCTGTCRTTCT-3' 5'-TCTGTCRTTCT-3' } 3'-T-5'	11mer	787	296
63	5'-GTGTTCT-3' 5'-GTGTTCT-3' } 3'-T-5'	8mer	64	126
64	5'-GTCRTTCT-3' 5'-GTCRTTCT-3' } 3'-T-5'	8mer	246	113

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Please replace Table 11 beginning at page 52 with the following amended Table:

Table 11. Immunomer Structure and Immunostimulatory Activity

<u>No.</u> <u>SEQ</u> <u>ID NO.</u>	Sequences and Modification (5'-3')	Oligo Length/ or Each Chain	IL-12 (pg/mL)	IL-6 (pg/mL)
			3 µg/mL	3 µg/mL
4	5'-CTATCTGACGTTCTCTGT-3'	18mer	1176	1892
65	5'-CTATCTGAYGTTCTCTGT-3' 5'-CTATCTGAYGTTCTCTGT-3' } 3'-T-5'	18mer	443	192
66	5'-CTATCTGACRTTCTCTGT-3' 5'-CTATCTGACRTTCTCTGT-3' } 3'-T-5'	18mer	627	464
67	5'-CTGAYGTTCTCTGT-3' 5'-CTGAYGTTCTCTGT-3' } 3'-T-5'	14mer	548	152
68	5'-CTGACRTTCTCTGT-3' 5'-CTGACRTTCTCTGT-3' } 3'-T-5'	14mer	1052	1020
69	5'-TCTGAYGTTCT-3' 5'-TCTGAYGTTCT-3' } 3'-T-5'	11mer	2050	2724
70	5'-TCTGACRTTCT-3' 5'-TCTGACRTTCT-3' } 3'-T-5'	11mer	1780	1741
71	5'-GAYGTTCT-3' 5'-GAYGTTCT-3' } 3'-T-5'	8mer	189	55
72	5'-GACRTTCT-3' 5'-GACRTTCT-3' } 3'-T-5'	8mer	397	212

Please replace Table 12 beginning at page 54 with the following amended Table:

Table 12. Immunomer Structure and Immunostimulatory Activity

<u>No.</u> <u>SEQ</u> <u>ID</u> <u>NO.</u>	Sequences and Modification (5'-3')	Oligo Length/ or Each Chain	IL-12 (pg/mL)	IL-6 (pg/mL)
			0.3 µg/mL	1 µg/mL
4	5'-CTATCTGACGTTCTCTGT-3'	18mer	257	635
73	5'-CTGACGTTCT-3' 5'-CTGACGTTCT-3' \searrow X ₁	10mer	697	1454
74	5'-CTGACGTTCT-3' 5'-CTGACGTTCT-3' \searrow X ₂	10mer	1162	669
75	5'-CTGACGTTCT-3' 5'-CTGACGTTCT-3' \searrow X ₃	10mer	1074	1375
76	5'-CTGACGTTCT-3' 5'-CTGACGTTCT-3' \searrow X ₄	10mer	563	705
77	5'-CTGACGTTCT-3' 5'-CTGACGTTCT-3' \searrow X ₅	10mer	264	543
78	5'-CTGACGTTCT-3' 5'-CTGACGTTCT-3' \searrow X ₆	10mer	1750	2258
79	5'-CTGACGTTCT-3' 5'-CTGACGTTCT-3' \searrow (X ₃ psX ₃)	10mer	2255	2034
80	5'-CTGACGTTCT-3' 5'-CTGACGTTCT-3' \searrow (X ₃ psX ₃ psX ₃)	10mer	1493	1197
81	5'-CTGACGTTCT-3' 5'-CTGACGTTCT-3' \searrow (X ₆ psX ₆)	10mer	3625	2642
82	5'-CTGACGTTCT-3' 5'-CTGACGTTCT-3' \searrow (X ₆ psX ₆ psX ₆)	10mer	4248	2988
83	5'-CTGACGTTCT-3' 5'-CTGACGTTCT-3' \searrow PO ₃ S	10mer	1241	1964

Please replace Table 13 beginning at page 56 with the following amended Table:

Table 13. Immunomer Structure and Immunostimulatory Activity

<u>No.</u> <u>SEQ</u> <u>ID</u> <u>NO.</u>	Sequences and Modification (5'-3')	Oligo Length/ or Each Chain	IL-12 (pg/mL)	IL-6 (pg/mL)
			0.3 µg/mL	1 µg/mL
4	5'-CTATCTGACGTTCTCTGT-3'	18mer	225	1462
84	5'-CTGACGTTCTCTGT-3' 5'-CTGACGTTCTCTGT-3' } 3'-T-5' (PO)	14mer	1551	159
85	5'-LLCTGACGTTCTCTGT-3' 5'-LLCTGACGTTCTCTGT-3' } 3'-T-5' (PO)	14mer	466	467

5 Please replace Table 14 beginning at page 57 with the following amended Table:

Table 14. Digestion of Oligonucleotides in 10 % Bovine Serum PBS Solution

<u>Oligo No.</u> <u>SEQ ID NO.</u>	Sequences and Modification (5'-3')	CE analysis of oligos (% intact oligo remained after digestion)		
		after 4h	After 24h	after 48h
4	5-CTATCTGACGTTCTCTGT-3'/PS	90.9	71.8	54.7
26	(5'-TCTGTCGTTCT) ₂ S/PS (G=dG ^{deaza})	97.1	91.0	88.1
86	(5'-CTGTCGTTCTCTGT) ₂ S/PO		37.8	22.5
87	(5'-XXCTGTCGTTCTCTGT) ₂ S/PO	73.1	56.8	36.8
88	(5'-UCTGTCGTTCTCTGT) ₂ S/PO		48.4	36.7

Please replace Table 15 beginning at page 59 with the following amended Table:

Table 15: Phosphorothioate CpG DNA sequences and modifications used in the study^a

<u>CpG</u> <u>DNA #</u> <u>SEQ</u> <u>ID</u> <u>NO.</u>	Sequence	Length	5'-end	3'-end
89	5'-TCCATGACGTTTCCTGATGC-3'	19-mer	1	1
90	5'-TCCATGACGTTTCCTGATGC-3'-b	19-mer	1	blocked
91	5'-TCCATGACGTTTCCTGATGC-3'-3'-g-5'	20-mer	2	blocked
92	5'-TCCATGACGTTTCCTGATGC-3'-3'-h-5'	23-mer	2	blocked
93	5'-TCCATGACGTTTCCTGATGC-3'-3'-i-5'	27-mer	2	blocked
94	5'-TCCATGACGTTTCCTGATGC-3'-3'-j-5'	38-mer	2	blocked
95	b-5'-TCCATGACGTTTCCTGATGC-3'	19-mer	blocked	1
96	3'-c-5'-5'-TCCATGACGTTTCCTGATGC-3'	20-mer	blocked	2
97	3'-d-5'-5'-TCCATGACGTTTCCTGATGC-3'	23-mer	blocked	2
98	3'-e-5'-5'-TCCATGACGTTTCCTGATGC-3'	27-mer	blocked	2
99	3'-f-5'-5'-TCCATGACGTTTCCTGATGC-3'	38-mer	blocked	2
100	5'-TCCATGACGTTTCCTGATGC-3'-k	19-mer	1	blocked
101	l-5'-TCCATGACGTTTCCTGATGC-3'	19-mer	blocked	1

5 Please replace Table 17 beginning at page 62 with the following amended Table:

Table 17. Sequences of CpG DNA showing the position of substitution.

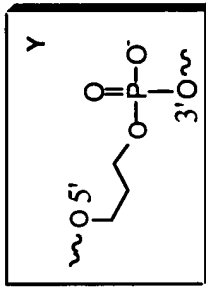
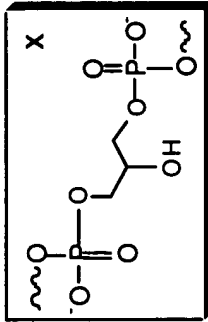
	<u>CpG DNA</u> <u>Number</u> <u>SEQ ID NO.</u>	Sequence (5'--->3') ^a
10	102	CCTACTAGCGTTCTCATC
	103	CCTACTAGC2TTCTCATC
	104	CCTACT2GCGTTCTCATC
15	105	CCTA2TAGCGTTCTCATC
	106	CCT22TAGCGTTCTCATC
	107	22TACTAGCGTTCTCATC
	108	CCTACTAGCGT2CTCATC
	109	CCTACTAGCGTTC2CATC
20	110	CCTACTAGCGTTC22ATC
	111	CCT6CTAGCGTTCTCATC
	112	CCTACTAGCGTTC6CATC
	113	CCT7CTAGCGTTCTCATC
	114	CCTACTAGCGTTC7CATC
25	4	CTATCTGACGTTCTCTGT
	115	CTAT1TGACGTTCTCTGT
	116	CTA1CTGACGTTCTCTGT

	117	CTATCTG2CGTTCTCTGT
	118	CTATC2GACGTTCTCTGT
	119	CTA2CTGACGTTCTCTGT
5	120	22222TGACGTTCTCTGT
	121	2222TGACGTTCTCTGT
	122	222TGACGTTCTCTGT
	123	22TGACGTTCTCTGT
	124	2TGACGTTCTCTGT
10	125	CTAT3TGACGTTCTCTGT
	126	CTA3CTGACGTTCTCTGT
	127	CTA33TGACGTTCTCTGT
	128	33TGACGTTCTCTGT
	129	CTAT4TGACGTTCTCTGT
	130	CTA4CTGACGTTCTCTGT
15	131	CTA44TGACGTTCTCTGT
	132	44TGACGTTCTCTGT
	133	CTAT5TGACGTTCTCTGT
	134	CTA5CTGACGTTCTCTGT
	135	CTA55TGACGTTCTCTGT
20	136	55TGACGTTCTCTGT
	137	CTA6CTGACGTTCTCTGT
	138	CTATCTGACGTTCTCTGT
	139	CTA7CTGACGTTCTCTGT
	140	CTATCTGACGTTCTCTGT
25	141	CTATCTG8CGTTCTCTGT
	142	CTATCT8ACGTTCTCTGT
	143	CTATC8GACGTTCTCTGT
	144	CTAT8TGACGTTCTCTGT
	145	CTA8CTGACGTTCTCTGT
30	146	CTATCTGACG8TCTCTGT
	147	CTATCTGACGT8CTCTGT
	148	CTATCTGACGTT8TCTGT
	149	CTATCTGACGTTCT8CTGT
	150	CTATCTG9CGTTCTCTGT
35	151	CTATCT9ACGTTCTCTGT
	152	CTA9CTGACGTTCTCTGT
	153	CTATCTGACGT9CTCTGT
	154	CTATCTGACGTTCT9CTGT

Please replace Table 21 beginning at page 70 with the following amended Table:

Table 21. PO-Immunomer sequences and analytical data

CpG-DNA SEQ ID NO	Sequence ^a	Backbone ^b Molecular Weight	
		Calculated	Found ^c
4	5'-CTATCTGACGTTCTCTGT-3' →	PS 5702	5704
155	5'-CTATCTGACGTTCTCTGT-3' →	PO 5432	5428
156	5'-CTGACGTTCTCTGT-X-TGTCCTCTTGCAGTC-5' ←	PO 8656	8649
157	5'-YYCTGACGTTCTCTGT-X-TGTCCTCTTGCAGTCYY-5' ←	PO 9208	9214



^aArrows indicate 5'-3' directionality of CpG dinucleotide in each DNA molecule and structures of X and Y are shown in boxes.
^bPS and PO stand for phosphorothioate and phosphodiester backbones, respectively.
^cAs determined by MALDI-TOF mass spectrometry.

Please replace Table 22 beginning at page 73 with the following amended Table:

Table 22. Immunomer Structure and Immunostimulatory Activity in BABL/C Mouse Spleen Cell Cultures

Oligo No. SEQ ID NO.	Sequences and Modification (5'-3')	Oligo Length/ or Each Chain	IL-12 (pg/mL)		IL-6 (pg/mL)	
			10 µg/mL	10 µg/mL	10 µg/mL	10 µg/mL
4	5'-CTATCTGACGTTCTCTGT-3'	18mer	2731	4547		
25	5'-CTATCTGTCGTTCTCTGT-3'	18mer	795	789		
158	5'-TCTGACGTTCT-3' \searrow X ₁ 5'-TCTGACGTTCT-3'	11mer	3490	5319		
159	5'-TCTGTCGTTCT-3' \searrow X ₁ 5'-TCTGTCGTTCT-3'	11mer	3265	4625		
160	5'-TCGTTG-3' \searrow X ₁ 5'-TCGTTG-3'	6mer	2085	2961		
161	5'-TCGTTG-3'XX \searrow X ₁ 5'-TCGTTG-3'XX	6mer	3169	5194		
162	5'-TCGTTG-3'X \searrow X ₁ 5'-TCGTTG-3'X	6mer	1015	705		
163	5'-TCGTT-3'X \searrow X ₁ 5'-TCGTT-3'X	5mer	2623	3619		
164	5'-ACGTTG-3'X \searrow X ₁ 5'-ACGTTG-3'X	6mer	564	845		
165	5'-GCGTTG-3'X \searrow X ₁ 5'-GCGTTG-3'X	6mer	196	0		
166	5'-CCGTTG-3'X \searrow X ₁ 5'-CCGTTG-3'X	6mer	219	0		
167	5'-GTCGTT-3'X \searrow X ₁ 5'-GTCGTT-3'X	6mer	1441	5056		
168	5'-TGTCGT-3'X \searrow X ₁ 5'-TGTCGT-3'X	6mer	198	0		
169	5'-TCGTTG-3'X \searrow X ₁ -X ₃ '-GTTGCT-5' 5'-TCGTTG-3'X	6mer	2410	4857		

Please replace Table 23A beginning at page 76 with the following amended Table:

Table 23A. Immunomer Structure and Immunostimulatory Activity in Human B-Cell Assay for Donor 1 (48 hs).

Oligo No. SEQ ID NO.	Sequences and Modification (5'-3')	IL-6 (pg/ml)	IL-10 (pg/ml)
		10 µg/ml DN1	10 µg/ml DN1
473 <u>26</u>	5'-TCTGTCG ₁ TTCT-X-TCTTG ₁ CTGTCT-5'	2718±35.5	132.7±5.5
474 <u>173</u>	5'-TCTGTCG ₂ TTCT-X-TCTTG ₂ CTGTCT-5'	2737±19	144±3.1
475 <u>170</u>	5'-TCTGTC ₁ GTTCT-X-TCTTG ₁ TGTCT-5'	2210±8.5	122.5±5.1
477 <u>175</u>	5'-TCTGTC ₃ GTTCT-X-TCTTG ₃ TGTCT-5'	2175±28.7	60.2±1.2
479 <u>171</u>	5'-CTGTCG ₂ TTCTC-X-CTCTTG ₂ CTGTC-5'	2714±2.7	132.1±1
481 <u>178</u>	5'-CTGTC ₂ GTTCTC-X-CTCTTG ₂ TGTC-5'	2166±29.6	30.9±0.2
483 <u>172</u>	5'-TCG ₁ TCG ₁ TTCTG-X-GTCTTG ₁ CTG ₁ CT-5'	2956±75	158.8±7.8
484 <u>180</u>	5'-TCG ₂ TCG ₂ TTCTG-X-GTCTTG ₂ CTG ₂ CT-5'	3057±37.2	132.7±2.7
485 <u>181</u>	5'-TC ₁ GTC ₁ GTTCTG-X-GTCTTG ₁ TGC ₁ T-5'	2171±18.6	50.9±1.6
486 <u>182</u>	5'-TC ₂ GTC ₂ GTTCTG-X-GTCTTG ₂ TGC ₂ T-5'	3067±21	53.6±0.2
487 <u>183</u>	5'-TC ₃ GTC ₃ GTTCTG-X-GTCTTG ₃ TGC ₃ T-5'	1760±2.4	37.7±1.3
205 <u>185</u>	5'-TG ₁ CTG ₁ CTTG-X-GTTTCG ₁ TCG ₁ T-5'	2138±41.3	25.7±0.2
media		1674±22	2.8±0.1

5 Please replace Table 23B beginning at page 76 with the following amended Table:

Table 23B. Immunomer Structure and Immunostimulatory Activity in Human B-Cell Assay for Donor 2 (48 hs).

Oligo No. SEQ ID NO.	Sequences and Modification (5'-3')	IL-6 (pg/ml)	IL-10 (pg/ml)
		10 µg/ml DN2	10 µg/ml DN2
473 <u>26</u>	5'-TCTGTCG ₁ TTCT-X-TCTTG ₁ CTGTCT-5'	521±2.6	0±0
475 <u>170</u>	5'-TCTGTC ₁ GTTCT-X-TCTTG ₁ TGTCT-5'	1157±0.9	30.9±0
483 <u>172</u>	5'-TCG ₁ TCG ₁ TTCTG-X-GTCTTG ₁ CTG ₁ CT-5'	2198±2.6	158±9.7
484 <u>180</u>	5'-TCG ₂ TCG ₂ TTCTG-X-GTCTTG ₂ CTG ₂ CT-5'	2464±34.5	289±23.6
485 <u>181</u>	5'-TC ₁ GTC ₁ GTTCTG-X-GTCTTG ₁ TGC ₁ T-5'	686±1.7	18.6±1

486 <u>182</u>	5'-TC ₂ GTC ₂ GTTCTG-X-GTCTTGC ₂ TGC ₂ T-5'	867±17	31.3±1.5
487 <u>183</u>	5'-TC ₃ GTC ₃ GTTCTG-X-GTCTTGC ₃ TGC ₃ T-5'	355±6.1	0±0
205 <u>185</u>	5'-TG ₁ CTG ₁ CTTG-X-GTTTCG ₁ TCG ₁ T -5'	132±0	0±0
media		65.6±2.8	0±0

Please replace Table 23C beginning at page 77 with the following amended Table:

Table 23C. Immunomer Structure and Immunostimulatory Activity in Human B-Cell Assay for Donor 3 (48 hs).

Oligo No. SEQ ID NO.	Sequences and Modification (5'-3')	IL-6 (pg/ml)	IL-10 (pg/ml)
		10 µg/ml DN3	10 µg/ml DN3
473 <u>26</u>	5'-TCTGTCG ₁ TTCT-X-TCTTG ₁ CTGTCT-5'	495±2.9	14.8±0.3
475 <u>170</u>	5'-TCTGTC ₁ GTTCT-X-TCTTGC ₁ TGTCT-5'	1043±0	28.4±1.4
483 <u>172</u>	5'-TCG ₁ TCG ₁ TTCTG-X-GTCTTG ₁ CTG ₁ CT-5'	1521±24.9	27.2±1.4
484 <u>180</u>	5'-TCG ₂ TCG ₂ TTCTG-X-GTCTTG ₂ CTG ₂ CT-5'	1018±13.4	33.5±0.7
485 <u>181</u>	5'-TC ₁ GTC ₁ GTTCTG-X-GTCTTGC ₁ TGC ₁ T-5'	423±3.9	9.5±0.2
486 <u>182</u>	5'-TC ₂ GTC ₂ GTTCTG-X-GTCTTGC ₂ TGC ₂ T-5'	524±36.2	9.0±0.1
487 <u>183</u>	5'-TC ₃ GTC ₃ GTTCTG-X-GTCTTGC ₃ TGC ₃ T-5'	184±3.3	5.8±0.3
205 <u>185</u>	5'-TG ₁ CTG ₁ CTTG-X-GTTTCG ₁ TCG ₁ T -5'	139.4±0	7.1±0.3
media		40.9±2.6	6.1±2.4

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Please replace Table 23D beginning at page 77 with the following amended Table:

Table 23D. Immunomer Structure and Immunostimulatory Activity in Human B-Cell Assay for Donor 4 (48 hs).

Oligo No. SEQ ID NO.	Sequences and Modification (5'-3')	IL-6 (pg/ml)	IL-10 (pg/ml)
		10 µg/ml DN4	10 µg/ml DN4
473 <u>26</u>	5'-TCTGTCG ₁ TTCT-X-TCTTG ₁ CTGTCT-5'	1027±0	360±59.8
474 <u>173</u>	5'-TCTGTCG ₂ TTCT-X-TCTTG ₂ CTGTCT-5'	1470±46.9	559±0
475 <u>170</u>	5'-TCTGTC ₁ GTTCT-X-TCTTGC ₁ TGTCT-5'	1272±23	470±1.1

477 <u>175</u>	5'-TCTGTC ₃ GTTCT-X-TCTTGC ₃ TGTCT-5'	848±6.8	133±4.5
479 <u>171</u>	5'-CTGTCG ₂ TTCTC-X-CTCTTG ₂ CTGTC-5'	1424±22	634±2.7
484 <u>178</u>	5'-CTGTC ₂ GTTCTC-X-CTCTTGC ₂ TGTC-5'	407±3.1	61.8±0.1
483 <u>172</u>	5'-TCG ₁ TCG ₁ TTCTG-X-GTCTTG ₁ CTG ₁ CT-5'	2837±72.2	738±5.5
484 <u>180</u>	5'-TCG ₂ TCG ₂ TTCTG-X-GTCTTG ₂ CTG ₂ CT-5'	1986±34.8	765±7.9
485 <u>181</u>	5'-TC ₁ GTC ₁ GTTCTG-X-GTCTTGC ₁ TGC ₁ T-5'	1126±23.1	165±1.6
486 <u>182</u>	5'-TC ₂ GTC ₂ GTTCTG-X-GTCTTGC ₂ TGC ₂ T-5'	1372±14.3	150±0.9
487 <u>183</u>	5'-TC ₃ GTC ₃ GTTCTG-X-GTCTTGC ₃ TGC ₃ T-5'	618±4.9	73±3.1
205 <u>185</u>	5'-TG ₁ CTG ₁ CTTG-X-GTTTCG ₁ TCG ₁ T-5'	891±13.6	37.8±0.5
media		88.6±0	3.8±0.4

Please replace Table 24A beginning at page 79 with the following amended Table:

Table 24A. Immunomer Structure and Immunostimulatory Activity in Human Dendritic Cell Assay for Donor 1 (24 hs)

Oligo No. SEQ ID NO.	Sequences and Modification (5'-3')	IFN- α (pg/ml)	IL-6 (pg/ml)	TNF- α (pg/ml)
		10 μ g/ml DN1	10 μ g/ml DN1	10 μ g/ml DN1
473 <u>26</u>	5'-TCTGTCG ₁ TTCT-X-TCTTG ₁ CTGTCT-5'	2524±99	6089±127	2643±22
474 <u>173</u>	5'-TCTGTCG ₂ TTCT-X-TCTTG ₂ CTGTCT-5'	21219±1 253	4581±54	7939±0
475 <u>170</u>	5'-TCTGTC ₁ GTTCT-X-TCTTGC ₁ TGTCT-5'	6692±19 5	4787±105	6021±0
477 <u>175</u>	5'-TCTGTC ₃ GTTCT-X-TCTTGC ₃ TGTCT-5'	4503±51 5	2379±188	3842±0
479 <u>171</u>	5'-CTGTCG ₂ TTCTC-X-CTCTTG ₂ CTGTC-5'	21903±6 4	5632±190	6790±0
484 <u>178</u>	5'-CTGTC ₂ GTTCTC-X-CTCTTGC ₂ TGTC-5'	284±2	2271±22	2086±0
483 <u>172</u>	5'-TCG ₁ TCG ₁ TTCTG-X-GTCTTG ₁ CTG ₁ CT-5'	27183±8 8	6859±38	7543±39
484 <u>180</u>	5'-TCG ₂ TCG ₂ TTCTG-X-GTCTTG ₂ CTG ₂ CT-5'	774±32	4632±35	5335±27
485 <u>181</u>	5'-TC ₁ GTC ₁ GTTCTG-X-GTCTTGC ₁ TGC ₁ T-5'	25260±2 311	3678±32	3010±60
486 <u>182</u>	5'-TC ₂ GTC ₂ GTTCTG-X-GTCTTGC ₂ TGC ₂ T-5'	28228±2 202	3993±42	2793±15
487 <u>183</u>	5'-TC ₃ GTC ₃ GTTCTG-X-GTCTTGC ₃ TGC ₃ T-5'	19735±4 23	3905±5	2510±3

205 185	5'-TG ₁ CTG ₁ CTTG-X-GTTCTG ₁ TCG ₁ T -5'	302±2	1394±123	1426±23
media		321±2	891±0	1595±0

Please replace Table 24B beginning at page 79 with the following amended Table:

Table 24B. Immunomer Structure and Immunostimulatory Activity in Human Dendritic Cell Assay for Donor 2 (24 hs)

<u>Oligo No. SEQ ID NO.</u>	Sequences and Modification (5'-3')	IFN- α (pg/ml)	TNF- α (pg/ml)	IL-6 (pg/ml)
		10 μ g/ml DN2	10 μ g/ml DN2	10 μ g/ml DN2
473 26	5'-TCTGTCTG ₁ TTCT-X-TCTTG ₁ CTGTCT-5'	1372±126	1942±11	804±15
475 170	5'-TCTGTCTG ₁ GTTCT-X-TCTTG ₁ TGTCT-5'	4097±292	2671±13	835±14
483 172	5'-TCG ₁ TCG ₁ TTCTG-X-GTCTTG ₁ CTG ₁ CT-5'	10952±208	828±14	1094±18
484 180	5'-TCG ₂ TCG ₂ TTCTG-X-GTCTTG ₂ CTG ₂ CT-5'	5669±367	2868±133	4734±19
485 181	5'-TC ₁ GTC ₁ GTTCTG-X-GTCTTG ₁ TGC ₁ T-5'	3860±180	1760±14	845±12
486 182	5'-TC ₂ GTC ₂ GTTCTG-X-GTCTTG ₂ TGC ₂ T-5'	3093±127	2006±70	582±2
487 183	5'-TC ₃ GTC ₃ GTTCTG-X-GTCTTG ₃ TGC ₃ T-5'	0±0	1406±18	466±0
205 185	5'-TG ₁ CTG ₁ CTTG-X-GTTCTG ₁ TCG ₁ T -5'	0±0	803±17	436±3
media		0±0	0±0	0±0

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Please replace Table 24C beginning at page 80 with the following amended Table:

Table 24C. Immunomer Structure and Immunostimulatory Activity in Human Dendritic Cell Assay For Donor 3 (24 hs)

<u>Oligo No. SEQ ID NO.</u>	Sequences and Modification (5'-3')	IFN- α (pg/ml)	TNF- α (pg/ml)	IL-6 (pg/ml)
		10 μ g/ml DN3	10 μ g/ml DN3	10 μ g/ml DN3
473 26	5'-TCTGTCTG ₁ TTCT-X-TCTTG ₁ CTGTCT-5'	0±0	2101±2	804±15

			6	
<u>475</u> <u>170</u>	5'-TCTGTC ₁ GTTCT-X-TCTTGC ₁ TGTCT-5'	2151±28	3810±5	835±14
<u>483</u> <u>172</u>	5'-TCG ₁ TCG ₁ TTCTG-X-GTCTTG ₁ CTG ₁ CT-5'	4977±2	678±13	1094±18
<u>484</u> <u>180</u>	5'-TCG ₂ TCG ₂ TTCTG-X-GTCTTG ₂ CTG ₂ CT-5'	2951±39	2085±6 0	4734±19
<u>485</u> <u>181</u>	5'-TC ₁ GTC ₁ GTTCTG-X-GTCTTG ₁ TGC ₁ T-5'	5075±154	1787±1 4	845±12
<u>486</u> <u>182</u>	5'-TC ₂ GTC ₂ GTTCTG-X-GTCTTG ₂ TGC ₂ T-5'	3203±5	2069±1 5	582±2
<u>487</u> <u>183</u>	5'-TC ₃ GTC ₃ GTTCTG-X-GTCTTG ₃ TGC ₃ T-5'	0±0	1936±1 3	466±0
<u>205</u> <u>185</u>	5'-TG ₁ CTG ₁ CTTG-X-GTTTCG ₁ TCG ₁ T-5'	0±0	846±12	605±8
media		0±0	0±0	0±0

Please replace Table 24D beginning at page 81 with the following amended Table:

Table 24D. Immunomer Structure and Immunostimulatory Activity in Human Dendritic Cell Assay for Donor 4 (24 hs)

Oligo No. <u>SEQ</u> <u>ID NO.</u>	Sequences and Modification (5'-3')	IL-6 (pg/ml)	TNF-α (pg/ml)
		10 µg/ml DN4	10 µg/ml DN4
<u>473</u> <u>26</u>	5'-TCTGTCG ₁ TTCT-X-TCTTG ₁ CTGTCT-5'	1144±182	411±93
<u>474</u> <u>173</u>	5'-TCTGTCG ₂ TTCT-X-TCTTG ₂ CTGTCT-5'	3386±28	2936±5
<u>475</u> <u>170</u>	5'-TCTGTC ₁ GTTCT-X-TCTTGC ₁ TGTCT-5'	4267±18	1832±68
<u>477</u> <u>175</u>	5'-TCTGTC ₃ GTTCT-X-TCTTGC ₃ TGTCT-5'	2254±41	1173±23
<u>479</u> <u>171</u>	5'-CTGTCG ₂ TTCTC-X-CTCTTG ₂ CTGTC-5'	5532±3	3494±142
<u>484</u> <u>178</u>	5'-CTGTC ₂ GTTCTC-X-CTCTTG ₂ TGTC-5'	1430±17	1127±55
<u>483</u> <u>172</u>	5'-TCG ₁ TCG ₁ TTCTG-X-GTCTTG ₁ CTG ₁ CT-5'	6564±77	2932±52
<u>484</u> <u>180</u>	5'-TCG ₂ TCG ₂ TTCTG-X-GTCTTG ₂ CTG ₂ CT-5'	5360±147	1584±24
<u>485</u> <u>181</u>	5'-TC ₁ GTC ₁ GTTCTG-X-GTCTTG ₁ TGC ₁ T-5'	3507±118	2326±60
<u>486</u> <u>182</u>	5'-TC ₂ GTC ₂ GTTCTG-X-GTCTTG ₂ TGC ₂ T-5'	2273±92	1297±36
<u>487</u> <u>183</u>	5'-TC ₃ GTC ₃ GTTCTG-X-GTCTTG ₃ TGC ₃ T-5'	2352±78	1237±28
<u>205</u> <u>185</u>	5'-TG ₁ CTG ₁ CTTG-X-GTTTCG ₁ TCG ₁ T-5'	1396±20	1000±0
media		695±19	651±3

Please replace Table 25A beginning at page 82 with the following amended Table:

Table 25A. Immunomer Structure and Immunostimulatory Activity in Human PBMC Assay for Donor 1 (48 hs)

Oligo No. SEQ ID NO.	Sequences and Modification (5'-3')	IL-6 (pg/ml)	IL-10 (pg/ml)
		10 µg/ml DN1	10 µg/ml DN1
473 26	5'-TCTGTCG ₁ TTCT-X-TCTTG ₁ CTGTCT-5'	483±2.6	49.9±1.3
474 173	5'-TCTGTCG ₂ TTCT-X-TCTTG ₂ CTGTCT-5'	722±9.1	50.3±1.6
475 170	5'-TCTGTC ₁ GTTCT-X-TCTTGC ₁ TGTCT-5'	502±14.2	46.9±1.9
477 175	5'-TCTGTC ₃ GTTCT-X-TCTTGC ₃ TGTCT-5'	400±2.8	39.4±0.5
479 171	5'-CTGTCG ₂ TTCTC-X-CTCTTG ₂ CTGTC-5'	466±17.8	47.6±0.4
484 178	5'-CTGTC ₂ GTTCTC-X-CTCTTG ₂ TGTC-5'	194±3.5	13.6±0.1
483 172	5'-TCG ₁ TCG ₁ TTCTG-X-GTCTTG ₁ CTG ₁ CT-5'	994±12.2	57.5±0.1
484 180	5'-TCG ₂ TCG ₂ TTCTG-X-GTCTTG ₂ CTG ₂ CT-5'	652±5	57.1±7.9
485 181	5'-TC ₁ GTC ₁ GTTCTG-X-GTCTTG ₁ TGC ₁ T-5'	370±1.9	37.6±6.1
486 182	5'-TC ₂ GTC ₂ GTTCTG-X-GTCTTG ₂ TGC ₂ T-5'	416±2.7	28.9±0.7
487 183	5'-TC ₃ GTC ₃ GTTCTG-X-GTCTTG ₃ TGC ₃ T-5'	323±5.9	29.7±0.3
205 185	5'-TG ₁ CTG ₁ CTTG-X-GTTTCG ₁ TCG ₁ T-5'	281±3.1	30.2±0.3
media		345±7.9	8.7±0.3

Please replace Table 25B beginning at page 82 with the following amended Table:

Table 25B. Immunomer Structure and Immunostimulatory Activity in Human PBMC Assay for Donor 2 (48 hs)

5

Oligo No. SEQ ID NO.	Sequences and Modification (5'-3')	IFN- γ (pg/ml)	IL-6 (pg/ml)	IL-10 (pg/ml)
		10 μ g/ml DN2	10 μ g/ml DN2	10 μ g/ml DN2
473 <u>26</u>	5'-TCTGTCG ₁ TTCT-X-TCTTG ₁ CTGTCT-5'	7.8 \pm 0.6	742 \pm 0.8	175 \pm 3.7
475 <u>170</u>	5'-TCTGTC ₁ GTTCT-X-TCTTG ₁ TGTCT-5'	26.6 \pm 1.1	939 \pm 34.1	147 \pm 5.8
483 <u>172</u>	5'-TCG ₁ TCG ₁ TTCTG-X-GTCTTG ₁ CTG ₁ CT-5'	29.1 \pm 0.2	1508 \pm 12.3	179 \pm 5.3
484 <u>180</u>	5'-TCG ₂ TCG ₂ TTCTG-X-GTCTTG ₂ CTG ₂ CT-5'	22.3 \pm 0.3	1294 \pm 51.2	397 \pm 11
485 <u>181</u>	5'-TC ₁ GTC ₁ GTTCTG-X-GTCTTG ₁ TGC ₁ T-5'	3.8 \pm 0.5	276 \pm 2.6	58 \pm 0.6
486 <u>182</u>	5'-TC ₂ GTC ₂ GTTCTG-X-GTCTTG ₂ TGC ₂ T-5'	3.6 \pm 0.1	590 \pm 3.4	73 \pm 4.1
487 <u>183</u>	5'-TC ₃ GTC ₃ GTTCTG-X-GTCTTG ₃ TGC ₃ T-5'	1.1 \pm 0.2	233 \pm 5.2	62.1 \pm 1.4
205 <u>185</u>	5'-TG ₁ CTG ₁ CTTG-X-GTTTCG ₁ TCG ₁ T-5'	3.6 \pm 0.5	203 \pm 12.3	34.8 \pm 2.7
media		0 \pm 0	97.4 \pm 2.7	3.6 \pm 1.1

Please replace Table 25C beginning at page 83 with the following amended Table:

Table 25C. Immunomer Structure and Immunostimulatory Activity in Human PBMC Assay for Donor 3 (48 hs)

10

Oligo No. SEQ ID NO.	Sequences and Modification (5'-3')	IFN- γ (pg/ml)	IL-6 (pg/ml)	IL-10 (pg/ml)
		10 μ g/ml DN3	10 μ g/ml DN3	10 μ g/ml DN3
473 <u>26</u>	5'-TCTGTCG ₁ TTCT-X-TCTTG ₁ CTGTCT-5'	63.8 \pm 6.3	642 \pm 12.6	75.2 \pm 5.2
475 <u>170</u>	5'-TCTGTC ₁ GTTCT-X-TCTTG ₁ TGTCT-5'	30.7 \pm 1.1	569 \pm 6.3	53.9 \pm 2.2
483 <u>172</u>	5'-TCG ₁ TCG ₁ TTCTG-X-GTCTTG ₁ CTG ₁ CT-5'	63.9 \pm 2.7	783 \pm 0.9	44.5 \pm 0.3

<u>484</u> <u>180</u>	5'-TCG ₂ TCG ₂ TTCTG-X-GTCTTG ₂ CTG ₂ CT-5'	32.9±2.4	570±3.6	74±1.1
<u>485</u> <u>181</u>	5'-TC ₁ GTC ₁ GTTCTG-X-GTCTTGC ₁ TGC ₁ T-5'	32.7±4.3	283±4.9	37.5±0.4
<u>486</u> <u>182</u>	5'-TC ₂ GTC ₂ GTTCTG-X-GTCTTGC ₂ TGC ₂ T-5'	33.7±1.6	376±10.4	48.7±0.6
<u>487</u> <u>183</u>	5'-TC ₃ GTC ₃ GTTCTG-X-GTCTTGC ₃ TGC ₃ T-5'	23±1.4	355±5.7	41.6±0.2
<u>205</u> <u>185</u>	5'-TG ₁ CTG ₁ CTTG-X-GTTTCG ₁ TCG ₁ T-5'	12.3±1.2	57.3±1.2	39.4±1.3
media		0±0	25.3±2.9	11.2±0.2

Please replace Table 25D beginning at page 84 with the following amended Table:

Table 25D. Immunomer Structure and Immunostimulatory Activity in Human PBMC Assay for Donor 4 (48 hs)

Oligo No. SEQ ID NO.	Sequences and Modification (5'-3')	IL-6 (pg/ml)	IL-10 (pg/ml)
		10 µg/ml DN4	10 µg/ml DN4
173 <u>26</u>	5'-TCTGTCG ₁ TTCT-X-TCTTG ₁ CTGTCT-5'	316±20.4	175±0
174 173	5'-TCTGTCG ₂ TTCT-X-TCTTG ₂ CTGTCT-5'	758±61.6	174±13.2
177 175	5'-TCTGTC ₃ GTTCT-X-TCTTGC ₃ TGTCT-5'	228±21.2	95±3.4
179 171	5'-CTGTCG ₂ TTCTC-X-CTCTTG ₂ CTGTC-5'	498±5.9	197±3
184 178	5'-CTGTC ₂ GTTCTC-X-CTCTTGC ₂ TGTC-5'	63±0	39±1.1
183 172	5'-TCG ₁ TCG ₁ TTCTG-X-GTCTTG ₁ CTG ₁ CT-5'	1318±32.8	215±0.9
184 180	5'-TCG ₂ TCG ₂ TTCTG-X-GTCTTG ₂ CTG ₂ CT-5'	976±24.9	251±9.3
185 181	5'-TC ₁ GTC ₁ GTTCTG-X-GTCTTGC ₁ TGC ₁ T-5'	449±0.9	96±1.4
186 182	5'-TC ₂ GTC ₂ GTTCTG-X-GTCTTGC ₂ TGC ₂ T-5'	210±4.2	62±6.3
187 183	5'-TC ₃ GTC ₃ GTTCTG-X-GTCTTGC ₃ TGC ₃ T-5'	237±2.1	80±3.9
205 185	5'-TG ₁ CTG ₁ CTTG-X-GTTTCG ₁ TCG ₁ T-5'	636±15.5	107±8.7
media		76.5±2.4	12.6±0.2